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EXAMINER

BOTTS, MICHAEL K

ART UNIT

PAPER NUMBER

2176

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/725,989

Applicant(s)

ABE ET AL.

Examiner

Michael K. Botts

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/03;12/05;1/06</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. This document is the First Office Action on the merits. This action is responsive to the following communications: The Non-Provisional Application, which was filed on December 1, 2003.
2. Claims 1-27 have been examined, with claims 1, 14, 15, and 27 being the independent claims.
3. Claims 1-27 are rejected.

### ***Information Disclosure Statement***

4. Signed and dated copies of applicant's IDS, which were filed on December 1, 2003, December 30, 2005, and January 17, 2006, are attached to this Office Action.

### ***The Specification***

5. Applicant is required to update the status (pending, allowed, etc.) of all parent priority applications in the first line of the specification. The status of all citations of U.S. filed applications in the specification should also be updated where appropriate.
6. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claims Rejections – 35 U.S.C. 112, First Paragraph***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. **Claims 23 and 24** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 23 and 24 recite the limitation "word-class data of "V." This term is not found in the specification.

Upon careful review of the specification and claims, the Examiner believes that the Applicants intended the term "word-class data of "V" to mean a placeholder in the data search, and the term will be so read for the remainder of this Office Action. See, disclosure, pages 12 and 13 discussing "V" comparable to the discussions of the use of "~" in the search terms.

8. In the interest of compact prosecution, the application is further examined against the prior art, as stated below, upon the assumption that the applicants may overcome the above stated rejection under 35 U.S.C. 112, first paragraph.

***Claims Rejections – 35 U.S.C. 112, Second Paragraph***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 23 and 24 recite the limitation "word-class data V." There is insufficient antecedent basis for this limitation in these claims.

10. In the interest of compact prosecution, the application is further examined against the prior art, as stated below, upon the assumption that the applicants may overcome the above stated rejection under 35 U.S.C. 112, second paragraph.

### ***Claims Rejections – 35 U.S.C. 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. **Claims 1, 14, 15, 25, and 27** are rejected under 35 U.S.C. 102(b) as being clearly anticipated by "WordNet, An Electronic Lexical Database," Fellbaum, Editor, The MIT Press, 1998, Chapter 4, pages 103-127, and Chapter 15, pages 353-377, [hereinafter "WordNet"].

Regarding **independent claim 1**, WordNet teaches:

*An information display apparatus having a display device, comprising:  
a storage storing explanation information concerning keywords;*

(See, WordNet, page 370, section 15.4.1, teaching the WordNet database as a "reusable knowledge library.")

*a keyword searching unit for searching for a keyword through the explanation information stored in the storage;*

(See, WordNet, page 370, figure 15.7, teaching keyword search of the word "borrowed" in the information stored in the storage.)

*a keyword display control unit for displaying in a list form on the display device plural keywords found by the keyword searching unit together with parts of explanation information respectively concerning the found keywords;*

(See, WordNet, page 370, figure 15.7, "WordNet Information," teaching display of plural keywords found in the search with parts of explanation information concerning the found keywords.)

*a keyword designating unit for designating either of the plural keywords displayed on the display device by the keyword display control unit; and*

(See, WordNet, figure 15.7, bottom right-hand corner, teaching selection of "sense: 2," and display of the document associated with "sense 2" in the upper-center of the display screen.)

*an explanation-information display control unit for displaying in a list form on the display device plural pieces of explanation information concerning the keyword designated by the keyword designating unit in such fashion that the explanation information is associated with the designated keyword, over the parts of the explanation information respectively concerning the found keywords displayed by the keyword display control unit in an overlapping manner.*

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(See, WordNet, page 206, figure 8.3, teaching the keyword designating unit, "Sensewin," displayed in an overlapping manner on the explanation-information control unit displaying, in a list form, plural pieces of explanation information concerning the keyword designated.)

Regarding **independent claim 14**, WordNet teaches:

*A recording medium storing a computer readable program for controlling a computer that works to perform an information displaying procedure in an information displaying apparatus provided with a display device, which program comprises:*

*a step of making the computer store explanation information concerning keywords;*

*a step of making the computer search for a keyword through the stored explanation information;*

*a step of making the computer display in a list form on the display device plural searched keywords together with parts of explanation information respectively concerning the searched keywords;*

*a step of making the computer designate either of the plural keywords displayed on the display device; and*

*a step of making the computer display in a list form on the display device plural pieces of explanation information concerning the designated keyword in such fashion that the explanation information is associated with the designated*

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*keyword, over the parts of the explanation information displayed on the display device, in an overlapping manner.*

(Claim 14 incorporates substantially similar subject matter as claimed in claim 1 and is rejected along the same rationale.)

Regarding **independent claim 15**, WordNet teaches:

*An information displaying apparatus having a display device, comprising: a storage storing keywords and plural pieces of explanation information concerning each keyword; a search character input unit for inputting search characters containing a series of words; a keyword searching unit for searching for one of the series of words entered through the search character input unit through the keywords stored in the storage; an explanation-information judging unit for judging whether or not the series of words entered through the search character input unit are included any of the plural pieces of explanation information concerning the keyword searched by the keyword searching unit; and a searched-information display unit for displaying on the display device a piece of the explanation information together with the keyword, in which piece of explanation information the explanation-information judging unit determines the series of words are included.*

(Claim 15 incorporates substantially similar subject matter as claimed in claim 1 and is rejected along the same rationale.)



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Regarding **dependent claim 25**, WordNet teaches:

*The information displaying apparatus as recited in either of claim 1 through claim 10, further comprising:*

*a second keyword selecting unit for selecting either of the plural keywords displayed by the searched-information display unit;*

*a second selected-keyword explanation-information display control unit for displaying the whole explanation information concerning the keyword selected by the second keyword selecting unit;*

*a second search-character locating unit for locating a portion in the explanation information displayed by the second selected-keyword explanation-information display control unit, in which portion the search characters consisting of plural words entered through the search-character input unit are included; and*

*a third search-character highlight display control unit for displaying the portion in the explanation information located by the second search-character locating unit in a different manner from other portions.*

(Claim 25 incorporates substantially similar subject matter as claimed in claim 1 and, in further view of the following is rejected along the same rationale. Claim 25 is read as merely repeating instances of functions enabled by the apparatus specified in claim 1.)

Regarding **independent claim 27**, WordNet teaches:

*A recording medium storing a computer readable program for controlling a computer that works to perform an information displaying procedure in an*

*information displaying apparatus provided with a display device, which program comprises: a step of making the computer store keywords and plural pieces of explanation information concerning each keyword; a step of making the computer input search characters; a step of making the computer search for one of the entered series of words through the keywords stored in the storage; a step of making the computer judge whether or not the entered series of words are included any of the plural pieces of explanation information concerning the searched keyword; and a step of making the computer display on the display device the piece of the explanation information which includes the entered series of words, together with the corresponding keyword.*

(Claim 27 incorporates substantially similar subject matter as claimed in claim 14 and is rejected along the same rationale.)

12. It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art.

See, MPEP 2123.

### ***Claims Rejection – 35 U.S.C. 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. **Claims 2-13, 16-24, and 26** are rejected under 35 U.S.C. 103(a) as being unpatentable over "WordNet, An Electronic Lexical Database," Fellbaum, Editor, The MIT Press, 1998, Chapter 4, pages 103-127, and Chapter 15, pages 353-377, [hereinafter "WordNet"].

Regarding **dependent claim 2**, WordNet teaches:

The information displaying apparatus as recited in claim 1, wherein the keyword display control unit displays in a list form the plural keywords found by the keyword searching unit in a first display area on the display device and further displays the parts of the explanation information of the plural keywords in a second display area adjacent to the first display area on the display device in such manner that both the explanation information and the keywords displayed in the first display area are associated with each other, and

the keyword designating unit designates one of the plural keywords that are displayed in the first display area by the keyword display control unit, and

the explanation-information display control unit displays in a list form the plural pieces of explanation information concerning the keyword designated by the keyword designating unit over the parts of the explanation information that are displayed in the second display area by the keyword display control unit in an

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overlapping manner, and further displays a balloon corresponding to the designated keyword so as to surround the plural pieces of explanation information.

(See, WordNet, figure 15.7, teaching the keyword display control unit displaying in a list form the plural keywords found as the "WordNet Information" section located in the lower-right hand corner, as a first display area. See also, the upper center text area of figure 15.7, identified as the "Requirements document," which is a second display area adjacent to the first display area and displays the parts of the explanation information of the plural keywords.

See also, WordNet, figure 15.7, teaching the keyword display control unit, located in the lower right-hand corner that designates the selected keyword as the "sense."

WordNet does not expressly teach the explanation-information display control unit displaying in a list form the plural pieces of explanation information concerning the keywords, but it does teach that the control information is available as a "next" or "previous" selection of the keywords in the identified text. See, WordNet, figure 15.7, teaching the explanation-information display control unit, lower right-hand corner, displaying the function to "traverse words through text." By virtue of the ordering of "next" and "previous," it is implicit in the teachings of WordNet that the explanation information is identified in an order. It would have been obvious to one of ordinary skill in the art at the time of the invention to have created an explicit ordered list of the keyword explanation information in place of the implicit ordered list. The motivation for

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such change is the obvious benefit of being able to jump from keyword to keyword instead of searching through each citation individually.

It is noted that the term “balloon” is not specially defined in the specification. Based on the discussion in the disclosure of figure 9C, the examiner believes that the Applicants intended the term “balloon” to mean a highlight or outline association the selected term and the references. See, figures 9C, element 36, and disclosure, page 19, line 26.

WordNet does not expressly teach to associate a keyword and its explanation information in a “balloon.” It would have been obvious to one of ordinary skill in the art at the time of the invention to have enclosed related material in a “balloon” for the obvious and beneficial purpose of drawing the user’s attention to the relationship. A box or circle or boarder surrounding related information is well known in the art such as in drop down or popup boxes of menu items from a windows menu.)

Regarding **dependent claim 3**, WordNet teaches:

*The information displaying apparatus as recited in claim 2, wherein, when all the plural pieces of explanation information concerning the designated keyword can not be displayed within the second display area, the explanation-information display control unit displays a partially broken balloon around the plural pieces of explanation information displayed in the second display area to indicate that there is at least an additional piece of explanation information that is not displayed in the second display area.*

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(It is noted that the term "broken balloon" is not understood as a standard term within the art, and is not specifically defined in the specification. Based on the discussion in the disclosure of figures 9C and 9D, the examiner believes that the Applicants intended the term "broken balloon" to mean text within square brackets, "[ text ]." See, figures 9C and 9D, and disclosure, page 20, lines 4-5, stating: "the balloon 36 with a break 37."

WordNet does not expressly teach the display of text within square brackets to indicate that additional text is available, but such would have been obvious to one of ordinary skill in the art at the time of the invention as a common method to indicate missing information. "Square brackets are used to enclose explanatory or missing [...] material, especially in quoted text. For example, "I appreciate it [the honor], but I must refuse"." See, Wikipedia, <http://en.wikipedia.org/wiki/Bracket>, article on "bracket."

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have indicated missing material in a reference using square brackets, or a "broken balloon," for the obvious beneficial purpose of saving space in the text.)

Regarding **dependent claim 4**, WordNet teaches:

*The information displaying apparatus as recited in claim 1, wherein  
the keyword display control unit displays first predetermined number of  
characters included in each of the parts of the explanation information; and*

*the explanation-information display control unit displays first predetermined number of characters included in each of the plural pieces of explanation information of the designated keyword.*

(See, WordNet, teaching the display. It would have been obvious to one of ordinary skill in the art at the time of the invention to have displayed a reference, information-information display, using predetermined number of characters. This was well known to one of ordinary skill in the art at the time of the invention as a “key word in context” or “KWIC” citation method and was commonly used in Lexis, LexisNexis, Westlaw, and other citation programs. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to display a reference using a predetermined number of characters for the obvious and beneficial purpose of displaying the keyword within a textual context as a guide to the user whether the particular reference is relevant to the user’s search.)

Regarding **dependent claim 5**, WordNet teaches:

*The information displaying apparatus as recited in claim 2, wherein the keyword display control unit displays in the second display area the predetermined number of characters included in each of the parts of the explanation information of the keywords to the extent that such number of characters can be displayed within the second display area, and the explanation-information display control unit displays in the second display area the predetermined number of characters included in each of the*

*plural pieces of explanation information of the designated keyword over the parts of the explanation information displayed in the second display area to the extent that such number of characters can be displayed within the second display area.*

(See, WordNet, teaching the display. It would have been obvious to one of ordinary skill in the art at the time of the invention to have displayed a reference, information-information display, using predetermined number of characters. This was well known to one of ordinary skill in the art at the time of the invention as a "key word in context" or "KWIC" citation method and was commonly used in Lexis, LexisNexis, Westlaw, and other citation programs. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to display a reference using a predetermined number of characters for the obvious and beneficial purpose of displaying the keyword within a textual context as a guide to the user whether the particular reference is relevant to the user's search.)

Regarding **dependent claim 6**, WordNet teaches:

*The information displaying apparatus as recited in claim 1, further comprising:*

*a designated-keyword changing unit for changing a designated keyword from the previously designated keyword to other keyword; wherein the explanation-information display control unit displays in a list form the plural pieces of explanation information concerning the designated keyword changed by the designated-keyword changing unit over the explanation information*



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*concerning the keywords displayed in a list form by the keyword display control unit.*

(WordNet does not expressly teach a "designated-keyword changing unit for changing a designated keyword for the previously designated keyword to other keyword," but such is inherent in the ability to search for a keyword. Simply, the user accesses the keyword searching function and enters a different keyword.

WordNet does not expressly teach layering the explanation information over the designated-keyword changing unit, but such would have been obvious to one of ordinary skill in the art at the time of the invention. Layering files, screens, and windows was well known to one of ordinary skill in the art at the time of the invention for the obvious and beneficial purpose of saving display space while keeping the other window easily accessible to the user, such as in Microsoft Windows and Apple graphical user environments.)

Regarding **dependent claim 7**, WordNet teaches:

*The information displaying apparatus as recited in claim 1, further comprising:*

*an explanation-information selecting unit for selecting either of the plural pieces of explanation information displayed in a list form; and*

*an explanation-information selection display control unit for displaying on the display device all the piece of explanation information selected by the explanation-information selecting unit.*

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(See, WordNet, figure 15.7, teaching the explanation-information selecting unit for selecting pieces of explanation information displayed in a list form, as taught in the lower-right hand corner, and the explanation-information selection display unit, taught in the top center of the display.)

Regarding **dependent claim 8**, WordNet teaches:

*The information displaying apparatus as recited in claim 1, further comprising:*

*a search-character input unit for inputting search characters;*

*wherein, when the search characters consisting of one word are entered through the search-character input unit, the keyword searching unit searches for a keyword through the keywords stored in the storage, which keyword coincides with the word included in the entered search characters, and when the search characters consisting of plural words are entered through the search-character input unit, the keyword searching unit searches for a keyword through the keywords stored in the storage, which keyword coincides with or includes a predetermined one of the plural words included in the entered search characters,*

(See WordNet, figure 15.7, teaching searching for single word keywords. See also, WordNet, page 107, section 4.1.1, teaching that plural words, taught as a “collocation,” may also be searched.)

*and the apparatus further comprising:*

*a first search-character judging unit for judging whether or not the search characters consisting of plural words entered through the search-character input unit are included in the explanation information concerning each of the keywords displayed by the keyword display control unit; and*

(See, WordNet, pages 117-126, teaching searching the database for single and plural words.)

*a highlight control unit for displaying a keyword corresponding to the explanation information, in which the first search-character judging unit determines the search characters consisting of plural words are included, in a different way from other keywords.*

(See, WordNet, teaching the display. It would have been obvious to one of ordinary skill in the art at the time of the invention to highlight plural word keywords differently from single word keywords for the obvious and beneficial purpose of indicating that the plural word keyword may have a different meaning or connotation than a single word that is included in the plural word term. To paraphrase Mark Twain, there is a substantial difference between "lightning" and "lightning bug.")

Regarding **dependent claim 9**, WordNet teaches:

*The information displaying apparatus as recited in claim 8, further comprising:*

*a keyword selecting unit for selecting either of the plural keywords displayed in a list form on the display device by the keyword display control unit;*

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(See, WordNet, figure 15.7, "Sense" located in the lower right-hand corner, teaching the keyword selecting unit, in the displayed case, selecting "sense: 2.")

*a selected-keyword explanation-information display control unit for displaying the whole explanation information concerning the keyword selected by the keyword selecting unit;*

(See, WordNet, figure 15.7, upper center of the display, teaching the keyword explanation-information display control unit as inherent by the fact that the keyword explanation-information is displayed.)

*a search-character locating unit for locating a portion in the explanation information displayed by the selected-keyword explanation-information display control unit, in which portion the search characters consisting of plural words entered through the search-character input unit are included; and*

(See, WordNet, lower right-hand corner, "next" and "previous" as the "traverse words through text," which is the search-character locating unit, locating the search term in the displayed text.)

*a first search-character highlight display control unit for displaying the portion in the explanation information located by the search-character locating unit in a different manner from other portions.*

(See, WordNet, figure 15.7, top center "requirements document," teaching highlighting the keyword display by underlining the keyword.)

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Regarding **dependent claim 10**, WordNet teaches:

*The information displaying apparatus as recited in claim 8, further comprising:*

*a second search-character judging unit for judging whether or not the search characters consisting of plural words entered through the search-character input unit are included in the plural pieces of explanation information displayed by the explanation-information display control unit; and*

*an explanation-information highlight display control unit for displaying a piece of explanation information, in which the second search-character judging unit determines the search characters consisting of plural words are included, in a different way from other explanation information.*

(See, WordNet, teaching the display. It would have been obvious to one of ordinary skill in the art at the time of the invention to highlight plural word keywords differently from single word keywords for the obvious and beneficial purpose of indicating that the plural word keyword may have a different meaning or connotation than a single word that is included in the plural word term.)

Regarding **dependent claim 11**, WordNet teaches:

*The information displaying apparatus as recited in claim 7, further comprising:*

*a search-character input unit for inputting search characters; wherein,*

*when the search characters consisting of one word are entered through the search-character input unit, the keyword searching unit searches for a keyword through the keywords stored in the storage, which keyword coincides with the word included in the entered search characters,*

(See WordNet, figure 15.7, teaching searching for single word keywords. See also, WordNet, page 107, section 4.1.1, teaching that plural words, taught as a “collocation,” may also be searched.)

*and when the search characters consisting of plural words are entered through the search-character input unit, the keyword searching unit searches for a keyword through the keywords stored in the storage, which keyword coincides with or includes a predetermined one of the plural words included in the entered search characters,*

*and the apparatus further comprising:*

*a search-character locating unit for locating a portion in the explanation information displayed by the explanation-information selection display control unit, in which portion the search characters consisting of plural words entered through the search-character input unit are included; and*

(See, WordNet, pages 117-126, teaching searching the database for single and plural words.)

*a second search-character highlight display control unit for displaying the portion in the explanation information located by the search-character locating unit in a different manner from other portions.*

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(It would have been obvious to one of ordinary skill in the art at the time of the invention to highlight portions of the display containing the keywords differently from the other portions of the display for the obvious and beneficial purpose of directing the user's attention to the portion of the text containing the keyword, and to further direct the user's attention to the context within which the keyword is cited, for the obvious and beneficial purpose of emphasizing the context and for making the keyword more visible in large bodies of text.)

Regarding **dependent claim 12**, WordNet teaches:

*The information displaying apparatus as recited in claim 8, wherein the first search-character judging unit replaces data of ".about." contained in the explanation information with a predetermined word included in the search characters consisting of the plural words entered through the search-character input unit, and judges whether or not the entered search characters consisting of the plural words are included in the explanation information with the data of ".about." replaced with the predetermined word.*

(It is noted that the term ".about." is disclosed in the specification as the grapheme tilde, "~". See, disclosure, page 12, line 25. The tilde was known to one of ordinary skill in the art at the time of the invention as a "swung dash," which is used as a placeholder for a word. "A character (~) used to stand for all or part of a word that has previously been spelled out." See, "The American Heritage College Dictionary," Fourth Edition, Houghton Mifflin, 2002, definition of "swung dash."

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WordNet teaches the plural word search function. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a swung dash as a placeholder, or a universal word, in a plural word search, for the obvious and beneficial purpose of capturing phrases within a broad context.)

Regarding **dependent claim 13**, WordNet teaches:

*The information displaying apparatus as recited in claim 9 or claim 11, wherein the search-character locating unit replaces data of ".about." contained in the explanation information with a predetermined word included in the search characters consisting of the plural words entered through the search-character input unit, and locates a portion in the explanation information with the data of ".about." replaced with the predetermined word, in which portion the entered search characters consisting of the plural words are included.*

(WordNet teaches the inventions specified in claims 9 and 11.

It is noted that the term ".about." is disclosed in the specification as the grapheme tilde, "~". See, disclosure, page 12, line 25. The tilde was known to one of ordinary skill in the art at the time of the invention as a "swung dash," which is used as a placeholder for a word. "A character (~) used to stand for all or part of a word that has previously been spelled out." See, "The American Heritage College Dictionary," Fourth Edition, Houghton Mifflin, 2002, definition of "swung dash."

WordNet teaches the plural word search function. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a swung dash as a



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placeholder, or a universal word, in a plural word search, for the obvious and beneficial purpose of capturing phrases within a broad context.)

Regarding **dependent claim 16**, WordNet teaches:

*The information displaying apparatus as recited in claim 15, wherein the searched-information display unit displays a keyword of each of the plural pieces of explanation information in which the explanation-information judging unit determines the series of words are included, together with parts of plural pieces of explanation information.*

(Claim 16 incorporates substantially similar subject matter as claimed in claim 4 and is rejected along the same rationale.)

Regarding **dependent claim 17**, WordNet teaches:

*The information displaying apparatus as recited in claim 15, wherein the keyword searching unit has a keyword selecting unit for selecting a word out of the series of words entered through the search character input unit;*  
*wherein the keyword searching unit searches for the word selected by the keyword selecting unit through the keywords stored in the storage.*

(Claim 17 incorporates substantially similar subject matter as claimed in claim 2 and is rejected along the same rationale.)

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Regarding **dependent claim 18**, WordNet teaches:

*The information displaying apparatus as recited in claim 17, wherein the keyword selecting unit selects as a keyword either of a noun, a verb and an adjective included in the series of words entered through the search character input unit.*

(See, WordNet, figure 4.6, and pages 105-127, teaching for searching for nouns, verbs, and adjectives.)

Regarding **dependent claim 19**, WordNet teaches:

*The information displaying apparatus as recited in claim 17, further comprising:*

*an other-keyword selecting unit for selecting a word to be searched for other than the word selected by the keyword selecting unit, when the explanation-information judging unit determines that there is no explanation information including any of the series of words entered through the search character input unit.*

(Claim 19 incorporates substantially similar subject matter as claimed in claim 6 and is rejected along the same rationale.)

Regarding **dependent claim 20**, WordNet teaches:

*The information displaying apparatus as recited in claim 15, wherein the keyword searching unit searches for the whole of the series of words entered*

*through the search character input unit through the keywords stored in the storage, and the searched-information display unit displays the explanation information in which the explanation-information judging unit determines the series of words are included, together with the keyword, and further displays keywords consisting of the series of words searched by the keyword searching unit.*

(Claim 20 incorporates substantially similar subject matter as claimed in claim 9 and is rejected along the same rationale.)

Regarding **dependent claim 21**, WordNet teaches:

*The information displaying apparatus as recited in claim 15, wherein the explanation-information judging unit replaces data of ".about." included in the explanation information concerning the keyword searched by the keyword searching unit with a word selected to be searched for from among the series of words entered through the search character input unit, and judges whether or not the entered series of words are included in the explanation information in which data of ".about." is replaced with the selected word.*

(Claim 21 incorporates substantially similar subject matter as claimed in claim 12 and is rejected along the same rationale.)

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Regarding **dependent claim 22**, WordNet teaches:

*The information displaying apparatus as recited in claim 21, wherein the searched-information display unit replaces data of ".about." included in the explanation information with a word selected to be searched for from among the series of words entered through the search character input unit, in which explanation information the explanation-information judging unit determines the series of words are included, and displays the explanation information in which data of ".about." is replaced with the selected word, together with the corresponding keyword.*

(Claim 22 incorporates substantially similar subject matter as claimed in claim 13 and is rejected along the same rationale.)

Regarding **dependent claim 23**, WordNet teaches:

*The information displaying apparatus as recited in claim 15, wherein the explanation-information judging unit replaces word-class data of "V" included in the explanation information concerning the keyword searched by the keyword searching unit with a word selected to be searched for from among the series of words entered through the search character input unit, and judges whether or not the entered series of words are included in the explanation information in which the word-class data of "V" is replaced with the selected word.*

(Claim 23 incorporates substantially similar subject matter as claimed in claim 13 and is rejected along the same rationale.)

Regarding **dependent claim 24**, WordNet teaches:

*The information displaying apparatus as recited in claim 23, wherein the searched-information display unit replaces word-class data of "V" included in the explanation information with a word selected to be searched for from among the series of words entered through the search character input unit, in which explanation information the explanation-information judging unit determines the series of words are included, and displays the explanation information in which the word-class data of "V" is replaced with the selected word, together with the corresponding keyword.*

(Claim 22 incorporates substantially similar subject matter as claimed in claim 13 and is rejected along the same rationale.)

Regarding **dependent claim 26**, WordNet teaches:

*The information displaying apparatus as recited in claim 15, wherein the searched-information display unit displays the explanation information with a "sample" mark or a "phrase" mark added, together with the keyword, in which explanation information the explanation-information judging unit determines the series of words are included.*

(See, WordNet, figure 15.7, lower right-hand corner, teaching the sample or phrase associated with the keyword. WordNet does not expressly teach displaying a mark to indicate a sample or a phrase. It would have been obvious to one of ordinary skill in the

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art at the time of the invention to have so marked the display to note the existence of a sample or phrase for the obvious and beneficial purpose of noting the existence of the sample or phrase in the event that the sample or phrase was not displayed on the same page. In WordNet, the sample or phrase is displayed on the same page as the searched-information display unit, and a flag is not necessary.)

14. It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art.

See, MPEP 2123.

### ***Conclusion***

15. The following prior art is made of record and not relied upon that is considered pertinent to applicants' disclosure:

Wolfe (U.S. Patent 6,301,576 B1), teaching document database searching techniques.

Pant, et al. (U.S. Patent 6,012,053), teaching relevance ranking of search results.

Thomson (U.S. Patent 5,634,051), teaching document typing and searching.

Kuga, et al. (U.S. Patent 5,280,573), teaching keyword searches.

Fowler (U.S. Patent Application Publication 2002/0194166 A1), teaching keyword searching.

Hart, et al. "Query-Free Information Retrieval," IEEE Expert, 1997, teaching search terms and relevant data recovery.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael K. Botts whose telephone number is 571-272-5533. The examiner can normally be reached on Monday through Friday 8:00-4:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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